1 EXECUTIVE SUMMARY

- 2 The California State Lands Commission (CSLC) has prepared this Draft Environmental
- 3 Impact Report (EIR) for the Asia America Gateway (AAG) Fiber Optic Cable Project
- 4 (Project) proposed by AT&T. The purpose of this EIR is to inform the public, permitting
- 5 agencies, and other decision-makers about the potential environmental impacts of the
- 6 proposed Project.
- 7 This EIR has been prepared in compliance with the California Environmental Quality Act
- 8 (CEQA) (Public Resources Code § 21000 et seq.) and associated implementing
- 9 regulations and guidelines.

10 PROJECT OBJECTIVES, PURPOSE AND NEED

- 11 AT&T is proposing to install one fiber optic cable from Hawaii to California as part of a
- 12 larger cable system originating in Asia. The proposed fiber optic cable would land at
- 13 AT&T's existing landing facility at Montaña de Oro State Park near Morro Bay,
- 14 California. The cable would be connected to the AT&T cable station located near San
- 15 Luis Obispo, California, via an existing terrestrial cable conduit system. The marine
- 16 cable would be installed using a combination of plowing and direct bottom lay along a
- 17 pre-determined course. The proposed cable would provide a link between the west
- 18 coast of the United States (U.S.), Hawaii, Guam, and Southeast Asia.
- 19 AT&T's basic objectives for the Project are to:
 - Complete Segment 5 of the AAG Fiber Optic Cable System by installing one submarine fiber optic cable on the continental shelf off Morro Bay, California, and bring it ashore through an existing conduit extending from a manhole in the Sandspit Beach parking lot in Montaña de Oro State Park. AT&T states that this new cable system will be a link in a global network that can provide voice, data and video services to all types of customers throughout the world (including private individuals, businesses and governmental entities). It will provide additional opportunities for commerce and information exchange, leading to closer economic and political ties among the participating countries;
 - Provide direct access and diverse routing between Southeast Asia and the U.S., linking the U.S. West Coast to Hawaii, Guam and Southeast Asia. The Project will be the first direct terabit (one trillion bits) submarine cable network linking Southeast Asia with the U.S. and will have advantages over the traditional trans-

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- Pacific routes (via the North Pacific) because it will provide an alternate route around the Pacific "ring of fire," thus increasing network resiliency and mitigating the effects of natural disasters that break numerous cables in a discrete geographic region (e.g., the 7.1 magnitude earthquake off Taiwan in December 2006 caused major damage to international underwater cable links and took out almost all cable systems in the region.); and
- Compliment existing high bandwidth cable systems in the region, including the APCN2 and the Japan-U.S. cable network. The AAG Fiber Optic Cable System will span 12,400 miles (20,000 kilometers [km]) and will use the latest Dense Wavelength Division Multiplexing (DWDM) technologies with a minimum design capacity of 1.28 terabits per second.

DESCRIPTION OF PROPOSED PROJECT

- 13 The AAG Fiber Optic Cable System is funded by a consortium of 17 national and
- 14 international companies. AT&T is the U.S. partner, which is responsible for the U.S.
- 15 connections. Other major partners include AiTi of Brunei, BayanTel, Bharti (India),
- 16 British Telecom Global Network Services, CAT Telecom (Thailand), ETPI (Philippines),
- 17 Maxis (Malaysia), PCP (Cambodia), PLDT (Philippines), Saigon Postal Corporation
- 18 (Vietnam) and the Vietnam Posts and Telecommunications Group.
- 19 AT&T is proposing to install one cable into San Luis Obispo County, California; no other
- 20 California or west coast landing location is associated with this new system. AT&T
- 21 selected the landing site for several reasons, among which were: the previous review,
- 22 permitting and installation of four submarine cables at the same location; conduit access
- 23 to an existing cable station in San Luis Obispo; and the availability of previously-
- 24 permitted and constructed shore facilities, consisting of a submerged conduit, beach
- 25 manhole, and conduit system at Montaña de Oro State Park (see Figure ES-1). These
- 26 existing facilities will accommodate the new AAG cable without requiring extensive new
- 27 construction. Within the State of California jurisdictional waters (generally referred to as
- 28 "the 3-mile limit" and legally extending to 3 nm [5.6 km] from shore) and continuing
- 29 across the continental shelf, the cable will be placed in proximity to the existing cables
- 30 that land at Montaña de Oro State Park.
- 31 AT&T has operated cable landings in the Montaña de Oro State Park, just south Morro
- 32 Bay, California, since the 1960's. In 1990, four directional conduits were installed on
- the ocean floor within California State Lands Commission (CSLC) lease PRC 7603.9,
- and a beach manhole was set in a parking lot located within the Montaña de Oro State

- 1 Park. At that time the HAW 5 cable was installed into one of the conduits. Additionally, 2 AT&T installed an overland conduit system, into which it placed two cables from the 3 beach manhole to the terminal building located 10.5 miles (16.9 km) inland near the City 4 of San Luis Obispo along the "ridge" of the hills just south of Clark Valley Road. As part 5 of the 1990 project, the Sandspit Beach parking lot and appurtenances were 6 constructed to improve beach access for visitors to the state park, and to allow access 7 to the cable conduit system for maintenance or future cable installation. One unused 8 conduit within the existing conduit system is available for the AAG submarine fiber optic 9 cable and two unused onshore conduits are available for the terrestrial fiber optic and 10 power cables.
- 11 The Project will include terrestrial, shore-end, and marine activities.
 - Terrestrial activities will occur along an existing conduit system that extends from the Sandspit Beach parking lot within Montaña de Oro State Park, south of the city of Morro Bay, to AT&T's San Luis Obispo Cable Station, which is located just south of San Luis Obispo;
 - Shore-end activities are those that occur within the existing subsurface cable conduit system that extends offshore (west) from the Sandspit Beach parking lot manhole to a water depth of approximately 98 feet (30 m). The shore-end activities include those that will occur within the subsurface conduit between the manhole and where the conduit emerges on the seafloor in approximately 33 feet (10 m) of water and then along the seafloor to the 98-foot (30 m) isobath, the depth where cable burial will be completed by divers; and
 - Marine activities will occur along a predetermined course from the 98-foot (30 m) isobath west to destinations in Hawaii, Guam, and Southeast Asia. The analysis of effects for this DEIR extends to the 6,000 foot (1,830 m) isobath approximately 54 miles (87 km) offshore.
 - Installation of the terrestrial portion of the Project is expected to commence immediately after certification of the environmental document late in the first quarter or within the second quarter of 2009. Installation of the shore-end and marine segments is expected to be initiated in the second quarter of 2009 following acquisition of all required permits.

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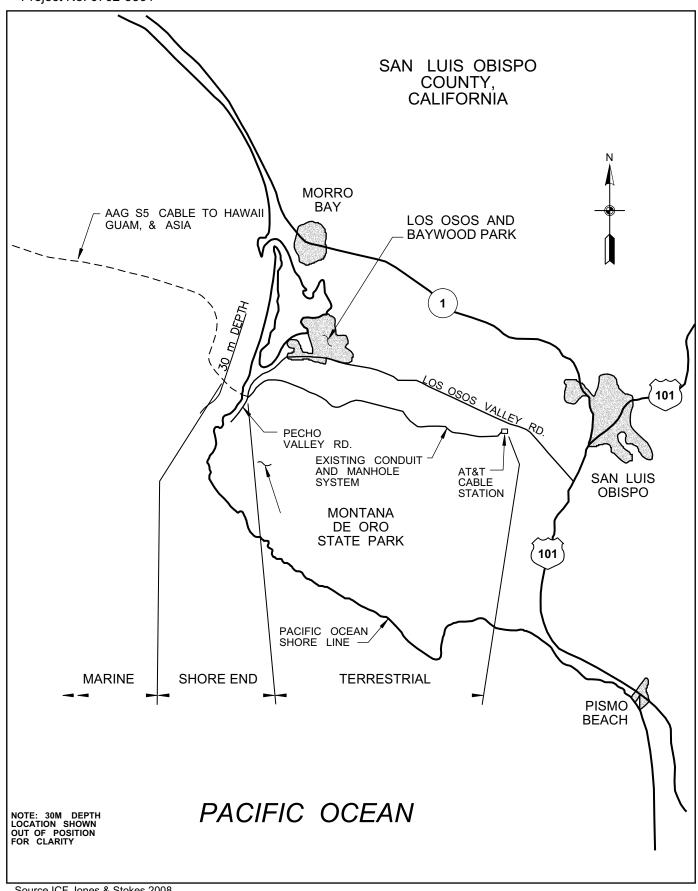
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1 ALTERNATIVES TO PROPOSED PROJECT

- 2 The CEQA guidelines require that a reasonable range of alternatives to the proposed
- 3 Project must be described and analyzed. Three alternative landing sites were analyzed
- 4 in two previous EIRs for similar projects and were deemed to be infeasible for
- 5 consideration for this Project. Two project alternatives were chosen for detailed
- 6 analysis in this EIR: the No Project/Action and the Maximum Burial/Re-route Alternative.
- 7 The Maximum Burial/Re-route alternative would meet the Project objectives while
- 8 attempting to mitigate environmental impacts identified under the proposed Project.
- 9 The alternatives selected for evaluation are described below.

10 No Project/Action or Postponed Project/Action

- 11 Under this alternative, the Project would not proceed, resulting in none of the Project
- 12 goals and objectives being met. No new cables would be installed offshore or onshore
- 13 at the Montaña de Oro landing site. Because no construction or operation-associated
- 14 impacts would occur, the No Project Alternative is the environmentally superior
- 15 alternative; however, as noted in CEQA section 15126.6(e)(2), if the No Project
- 16 Alternative is determined to be the environmentally superior alternative, the EIR must
- 17 also identify another environmentally superior alternative among the other alternatives.

Maximum Burial/Re-route Alternative

AT&T has developed a relatively detailed seafloor habitat map within the proposed fiber optic cable corridor and has proposed an alternative route that avoids most, but not all, of the rock features. This alternative route would minimize the area of rocky habitat crossed by the cable, which, in turn, would allow the maximum length of the cable to be buried within water depths of up to 6,000 ft (1,830 m). Outcropping rock was identified at kilometer posts (KP) 8.0-8.1, 56.8-57.7, 76.0-76.7, and 83.3-88.5. For example, the area between KP 8.0 and 8.1 would be re-routed either to the north or south to avoid hard bottom outcrops on the seafloor. Only limited geologic and Remotely Operated Vehicle (ROV) survey information is available for the areas north and south of the proposed route outside of the surveyed corridor. Because the cable would be re-routed, this alternative would require up to 1.9 miles (3.1 km) of additional cable between existing KP 8.0 and 8.1. Additional cable would also be required to avoid rock features between the previously listed KPs. However, the total length of additional cable at each re-route cannot be determined at this time due to the limitations of the existing routespecific geologic data. This alternative would reduce or eliminate potential impacts of the cable crossing rocky habitat and affecting this sensitive habitat and associated

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- 1 biota; however, realignment to facilitate maximum burial could conflict with cable
- 2 spacing regulations.

3 ENVIRONMENTAL IMPACTS AND MITIGATION

- 4 The EIR identifies and analyzes the potentially significant environmental impacts
- 5 associated with the installation, operation, and, to a lesser extent, the future
- 6 abandonment and removal of the proposed Project. The impact analysis is based on
- 7 information provided by AT&T in the initial applications and in response to subsequent
- 8 data requests, as well as supplementary investigations and research conducted by the
- 9 EIR preparers.
- 10 The analysis indicates that the proposed Project would result in certain adverse
- 11 environmental impacts; however, the majority of these impacts would not be significant.
- 12 The potentially significant impacts identified in the analysis include effects on aesthetics,
- 13 air quality, biological resources, cultural resources, geology and soils, hydrology and
- water quality, land use/recreation, noise, and system safety during installation of the
- 15 cable. All of the potentially significant impacts of the proposed Project can be reduced
- to a less than significant level with the implementation of mitigation measures.
- 17 Table ES-1 presents a summary of impacts and mitigation measures for the proposed
- 18 Project by issue area. Within each issue area each impact is described and classified,
- 19 recommended mitigation is listed. Issues with only "less than significant" impacts are
- 20 listed at the bottom of Table ES-1.

21 COMPARISON OF PROPOSED PROJECT AND ALTERNATIVES

- 22 The CEQA guidelines (Section 15126.6 (d)) requires that an EIR include sufficient
- 23 information about each alternative to allow meaningful evaluation, analysis, and
- 24 comparison with the proposed Project. A matrix displaying the major characteristics
- 25 and significant environmental effects of each alternative may be used to summarize the
- 26 comparison. Table ES-2 provides a comparison of the proposed Project with the two
- 27 alternatives evaluated in this document, including the No Project Alternative.

Table ES-1. Summary of Environmental Impacts for the Proposed Project

Impact Class I

- = Significant adverse impact that remains significant after mitigation. Only Class I impacts have residual impacts.
- II = Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
- III = Adverse impact that does not meet or exceed an issue's significance criteria.
- IV = Beneficial impact.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures				
Section 4.1 -	Section 4.1 - Aesthetics/Visual Resources						
AVR-1 Light and glare impacts		II	AVR-1. During construction, position all elevated onshore construction lighting downward and/or toward the west and south.				
AVR-2	Vegetation trimming and removal	II	AVR-2a. AT&T shall trim all woody vegetation in preference to cutting, and shall cut all woody vegetation in preference to bulldozi AVR-2b. Existing ground cover shall be cleared and piled only to extent necessary. Slash and limbs shall be disposed of as directly the appropriate agency official Implement MM-TERBIO-3a and b: Oak tree avoidance and certification.				
Section 4.2 -	Air Quality						
AQ-1	Vessels used for construction and decommissioning could temporarily exceed daily emission thresholds for ozone precursors within the APCD.	II	 MM AQ-1a. Use low-emission fuel in all smaller diesel-powered vessels and in all construction equipment. MM AQ-1b. Contribute, as determined by the APCD, to an off-si emission reduction program within the APCD jurisdiction. 				
AQ-2	The Proposed Project would produce greenhouse gas emissions and contribute to climate change.	II	MM AQ-2. The Applicant shall participate in a Carbon Offsets Program and will purchase carbon offsets equivalent to the projected project's GHG emissions to achieve a net zero increase in GHG emissions during the construction phase.				
Section 4.3 -	Section 4.3 - Biological Resources						
TERBIO-1	Impacts to migratory birds and raptors	II	Implement 1990 County Conditions of Approval, and TERBIO-1a. Avoidance of nesting period or, TERBIO-1b. If MM TERBIO-1a is infeasible, complete pre				

Impact No.	Impact	Impact Class	Recommended Mitigation Measures	
			construction nesting bird surveys.	

Table ES-1. (Continued)

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
TERBIO-2	Impacts to terrestrial sensitive species	II	Implement 1990 County Conditions of Approval, and TERBIO-2a-k. Conduct worker orientation, biological monitoring during construction, exclusionary fencing, limits on night-time activities, obtain USFWS Incidental Take Permit or Habitat Conservation Plan, approval from State Parks on Mitigation Plan, preactivity surveys for special-status species along cable route and Los Osos Creek crossings, and prohibit pets on-site during Project construction.
TERBIO-3	Degradation of natural habitats	II	Implement 1990 County Conditions of Approval, and TERBIO-3a-c. Avoid unnecessary impacts to oak trees, use certified arborist for all pruning of oak trees, install and monitor long-term erosion control devices.
MARBIO-1	Potential rock substrate disturbance during pre-lay grapnel survey	II	MARBIO-1: Prepare and implement pre-survey map for rock avoidance.
MARBIO-2	Impacts to rock substrate during vessel anchoring and nearshore cable placement	II	MARBIO-2a: Prepare and implement anchoring plan. MARBIO-2b: Cable placement area clearance procedures.
MARBIO-3	Damage to rock substrate during cable laying	II	MARBIO-3: Post-lay ROV survey, report and compensation determination.
MARBIO-4	Marine mammal-vessel interaction during cable laying	II	MARBIO-4: Marine Wildlife Contingency Plan
MARBIO-5	Incidental and accidental vessel discharges	II	MARBIO-5a: Zero Discharge Policy. MARBIO-5b: Spill Response and Recovery Plan.
MARBIO-6	Damage to rock substrate during maintenance and repairs	II	MARBIO-6: Pre-planning for cable recovery and repair operations.
Section 4.4 -	Cultural Resources		
CR-1	Construction related cultural resource impacts	II	CR-1a. Cultural resource monitoring plan. CR-1b. Preconstruction meeting. CR-1c. Cultural resource monitoring. CR-1d. Any cultural and/or paleontological resource discovered must be immediately reported to the appropriate agency official.

Table ES-1. (Continued)

Impact No.	Impact	Impact Class	Recommended Mitigation Measures				
CR-2	Archaeological resources or human remains discovery	II	CR-2. If archaeological resources or human remains are discovered during construction, notify the Coroner and County Planning, and work shall be halted within 164 ft (50 meters) of the find until evaluated by a qualified archaeologist.				
CR-3	Construction activities within areas of previously-recorded onshore cultural resources	II	CR-3. During construction certain activities shall be restricted from sensitive areas.				
CR-4	Damage to previously unknown or unrecorded offshore cultural resource or shipwreck	II	CR-4a. Detailed resources assessment. CR-4b. Reroute cable as needed. Implement MM-MARBIO-5b: Spill Response and Recovery Plan.				
Section 4.5 -	Section 4.5 - Commercial and Recreational Fishing						
Impacts less t	han significant (Class III). No proposed mitigation	n measures.					
Section 4.6 -	Geology, Soils, Faults and Mineral Resources						
GEO-1 Onshore Erosion Impacts During Construction Activities. Construction during the wet season has the potential to result in erosion along access roads and at work zones along the onshore cable conduit route.		II	Implement MM-WQ-1: Prepare and implement a Storm Water Pollution Prevention Plan. Implement MM-TERBIO-3c: Erosion Control Monitoring.				
Section 4.7 -	Hydrology and Water Quality						
WQ-1 Erosion and sedimentation impacts during construction activities		II	WQ-1: Prepare and implement storm water pollution prevention pl Implement MM TERBIO-2e Spill Prevention and Contingency P and MM TERBIO-3c Erosion control monitoring.				
WQ-2	Effects of a petroleum discharge during construction activities	II	WQ-2: Prepare spill response and recovery plan.				
WQ-3	Discharge of contaminated water during pipe preparation activities	II	WQ-3: Water quality testing and reporting for pipe flushing water.				

Table ES-1. (Continued)

Impact No.	Impact	Impact Class	Recommended Mitigation Measures				
Section 4.8 -	Section 4.8 - Land Use and Recreation						
REC-1	Loss of Recreational Parking at the Sandspit Beach Parking Lot	II	REC-1a. AT&T shall notify and receive approval of project schedule from the CDPR and submit that approval to CSLC. MM REC-1b: AT&T shall provide signage along Pecho Valley Road prior to initiating in-parking lot activities.				
Section 4.9 -	Marine Transportation						
Impacts less t	han significant (Class III). No proposed mitigation	measures.					
Section 4.10	- Noise						
NOI-1	Exceed NOAA-Specified Noise Levels for Marine Mammal Harassment During Cable Laying Operations	II	NOI-1: Marine Wildlife Contingency Plan				
Section 4.11	- System Safety/Risk of Upset						
SYS-1	SYS-1: Accidental Spill During Onshore Construction Activities	II	SYS-1a: Spill Response Equipment. SYS-1b: Re-fuelling and Equipment Repair near Wetlands and Water Courses Prohibited. SYS-1c: Disposal of Spill Recovery Materials.				
SYS-2	SYS-2: Incidental and accidental vessel discharges	II	MARBIO-5a: Zero Discharge Policy. MARBIO-5b: Spill Response and Recovery Plan.				
Section 4.12	- Transportation/Circulation						
Impacts less t	han significant (Class III). No proposed mitigation	measures.					

Table ES-2. Summary of Environmental Impacts for Proposed Project and Alternatives

- Impact Class I = Significant adverse impact that remains significant after mitigation.
 - II = Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
 - III = Adverse impact that does not meet or exceed an issue's significance criteria.
 - IV = Beneficial impact.

Impact No.	Impact Description	Proposed Project	No Project Alternative	Maximum Burial/ Re-route Alternative
Section 4.1 - Aesthetic	s/Visual Resources			
AVR-1	Potential light and glare during construction activities at the Sandspit Beach parking lot.	II	III	II
AVR-2	Vegetation trimming and removal during cable pulling along onshore cable conduit.	II	III	II
Section 4.2 - Air Qualit	у			
AQ-1	Vessels used for construction and decommissioning could temporarily exceed daily emission thresholds for ozone precursors within the APCD.	II	III	II
Section 4.3 - Biologica	I Resources			
TERBIO-1	Impacts to nesting activities of migratory birds and raptors	II	III	II
TERBIO-2	Impacts to special status and sensitive terrestrial plant and animal species	II	III	II

Table ES-2. (Continued)

Impact No.	Impact Description	Proposed Project	No Project Alternative	Maximum Burial/ Re-route Alternative
TERBIO-3	Degradation of natural habitats	II	III	II
MARBIO-1	Potential rock substrate disturbance during pre-lay grapnel survey	II	III	II
MARBIO-2	Impacts to rock substrate during vessel anchoring and nearshore cable placement	II	III	II
MARBIO-3	Damage to rock substrate during cable laying	II	III	П
MARBIO-4	Marine mammal-vessel interaction during cable laying	II	III	II
MARBIO-5	Incidental and accidental vessel discharges	II	III	II
MARBIO-6	Damage to rock substrate during maintenance and repairs	II	III	II
Section 4.5 - Cultural R	Resources			
CR-1	Onshore excavation- related cultural resource impacts	II	III	II
CR-2	Exposure or damage to onshore archaeological resources or human remains	II	III	II
CR-3	Construction activities within areas of previously- recorded onshore cultural resources	II	III	II

Table ES-2. (Continued)

Impact No.	Impact Description	Proposed Project	No Project Alternative	Maximum Burial/ Re-route Alternative
CR-4	Damage to previously unknown or unrecorded offshore cultural resource or shipwreck	II	III	II
Section 4.6 - Geology,	Soils, Faults and Mineral Resou	rces		
GEO-1	Erosion impacts during onshore construction activities	II	I	II
Section 4.7 - Hydrology	and Water Quality			
WQ-1	Erosion and sedimentation impacts during construction activities.	II	I	II
WQ-2	Effects of petroleum discharge during construction activities	П	III	II
WQ-3	Discharge of contaminated water during pipe preparation activities	II	III	II
Section 4.8 - Land Use	and Recreation			
REC-1	Loss of Recreational Parking at the Sandspit Beach Parking Lot	II	III	II
Section 4.10 - Noise				
NOI-1	Project activities will exceed NOAA-specified noise levels for marine mammal harassment	II	III	II

Table ES-2. (Continued)

Impact No.	Impact Description	Proposed Project	No Project Alternative	Maximum Burial/ Re-route Alternative			
Section 4.11 - System Sa	Section 4.11 - System Safety/Risk of Upset						
SYS-1	Accidental petroleum discharge from onshore equipment or vehicles	II	III	II			
SYS-2	Incidental or accidental discharge from Project vessel	II	III	II			

1 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

- 2 The CEQA Guidelines [section 15126.6 (d)] require that an EIR include sufficient
- 3 information about each alternative to allow meaningful evaluation, analysis, and
- 4 comparison with the proposed Project. The Guidelines [Section 15126.6 (e)(2)] further
- 5 state, in part, that "If the environmentally superior alternative is the "No Project"
- 6 alternative, the EIR shall also identify an environmentally superior alternative among the
- 7 other alternatives." (Emphasis added).
- 8 Given the relative impacts and merits of the proposed Project and each alternative that
- 9 was considered in this EIR, and based on the discussion presented above, as designed
- 10 and with incorporation of the recommended mitigations, the proposed Project is
- 11 considered to be the environmentally superior alternative as the Maximum Burial
- 12 Alternative results in increased risks of system safety/risk of upset due to the additional
- 13 cable crossings.

14 KNOWN AREAS OF CONTROVERSY OR UNRESOLVED ISSUES

- 15 The Applicant is a member of the Central California Joint Cable/Fisheries Liaison
- 16 Committee which has adopted a 2002 Final Agreement that specifies the terms,
- 17 procedures, and rules for providing compensation to any fisherman whose gear is
- damaged or lost if snagged on the proposed cable.
- 19 No other areas of controversy have to date emerged regarding the proposed Project.